

REMARKS

Claims 1-6 are pending in the application.

Claims 1-6 are rejected.

Claim 1 has been amended.

Claims 1 and 6 are independent claims.

A. Claim rejection under 35 U.S.C. § 102

Claims 1 and 6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Savegh, et al., (U. S. Patent No. 5,182,785). Patent '785 relates to a high-flex optical fiber coil cable. Savegh, et al., described their invention as a flexible coiled optical fiber cable having an expanded buffer layer and heat-setable jacket to provide a cable useful in high-flex environments (see Abstract). Further they described the invention as relating to optical waveguide fiber cables in coil form which are flexed or increased or decreased in length during use. In this specification, Savegh, et al., described a jacketed cable that is heat-set into a coil (column 4, lines 12-14). The jacket must be either heat-setable or possess elastic memory so that it will hold the coil shape when the coil is formed (column 4, lines 16-18).

Thus, it is clear, that the object of the invention in the Savegh, et al., patent is to provide a cable that may be repeatably flexed. The application confirms this by attesting that "a cable of the invention has been flexed 1-1.5 million times with minimal optical degradation" (column 4, lines 30-32).

In contrast, the present invention is directed to a method for controlling the bend radius of a portion of an optical fiber by providing a heat shrinkable jacket that causes the optical fiber cable to assume a desired bend angle. Thus, the present invention attempts to fix the optical cable at a desired bend angle, while the invention discussed in the Savegh, et al., patent is aimed, rather, at providing a fiber that may be bent repeated times (1-1.5 million!). It is thus evident that the two inventions are directed to diametrically opposite objectives, which are achieved in different ways. The Applicants respectfully submit that the cited reference does not teach or suggest using a heat shrinkable jacket to cause the optical fiber to assume a desired bend angle.

that controls the bend radius of the portion of the optical fiber cable.

As claimed features of the present invention are not taught or suggested by the cited reference, allowance of depending claims 1 and 6 is respectfully requested.

B. Claim rejections under 35 U.S.C. § 103

Claims 2 - 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Savegh, et al., in view of Daoud, U. S. Pat. No. 6,263,144.

Daoud relates to a fiber optic cable routing and storage device. This device is akin to a bobbin for holding thread, it neither permanently shapes nor deforms the thread, it is merely provided as a tool for winding a length of optical fiber. There is no reference found by the Applicants anywhere in Daoud that teaches, suggests, or even mentions using the storage device to shape a jacket around the optical fiber cable. Furthermore, there is also no suggestion or reference in Savegh, et al., to using a mandrill or a shaping device while curing the outer jacket into a fixed position. As discussed above, the object of Savegh, et al., is directly contrary to the object of the present invention, where Savegh, et al., seeks repeatable flexibility, the present invention seeks to shape the fiber into a desired bend radius.

As the cited references, either alone or in combination do not teach or suggest the claimed elements of claims 2-5, allowance of the rejected claims is respectfully requested.

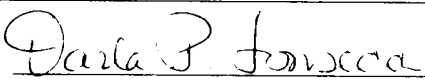
CONCLUSION

If there are any matters that may be resolved or clarified through a telephone interview, the Applicants' Attorney, Néstor F. Ho, Reg. No. 39,460, makes himself available at the telephone number listed below. Alternately, the Examiner may fax communications directly to the Applicants' Attorney at the facsimile number listed below.

The Applicants believe that no fees are necessary in relation with the filing of the present communication other than the two-month extension, attached. If the Applicants are mistaken, the Applicants hereby authorize the Commissioner to deduct any additionally required fees from or credit any overpayment to Deposit Account 13-3723.

Respectfully submitted,

Registration Number 31,783	Telephone Number 512-984-7443
Date October 8, 2002	

By 
Darla P. Fonseca

Office of Intellectual Property Counsel
3M Innovative Properties Company
P.O. Box 33427
St. Paul, Minnesota 55133-3427
Facsimile: (651) 736-3833

Examiner: Sung H. Pak

Art Unit: 2874

VERSION WITH MARKINGS TO SHOW CHANGES MADE

New Title:

**APPARATUS AND METHOD FOR CONTROLLING THE BEND
RADIUS OF AN OPTICAL FIBER CABLE**

In the Claims:

1. A method for controlling the bend radius of at least a portion of an optical fiber cable having at least one optical fiber, the method comprising the steps of:

- a. providing a jacket of a heat shrinkable-material;
- b. placing the jacket around the portion of the optical fiber cable;
- c. bending the portion of the optical fiber cable at a desired bend angle; and
- d. shrinking the jacket around the optical fiber cable by the application of heat
causing the optical fiber cable to assume the desired bend angle.

Replace page 22 with:

ABSTRACT

A bend radius control member for controlling the bend radius of an optical fiber cable including a deformation resistant heat shrunk outer jacket wrapped around the optical fiber cable. The heat shrunk outer jacket has a desired bend radius curvature.